



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

*su*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,600	06/08/2001	Thomas J. Kennedy III	P-5550-1-C1	2472

24492 7590 09/17/2004

THE TOP-FLITE GOLF COMPANY, A WHOLLY OWNED  
SUBSIDIARY OF CALLAWAY GOLF COMPANY  
P.O. BOX 901  
425 MEADOW STREET  
CHICOPEE, MA 01021-0901

EXAMINER

GORDON, RAEANN

ART UNIT	PAPER NUMBER
----------	--------------

3711

*14*

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/877,600

Applicant(s)

KENNEDY ET AL

Examiner

Raeann Gorden

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 3711

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Newcomb (4,695,055). Newcomb discloses a golf ball formed from reaction injection molding (column 1, lines 36-40). The ball structure includes a homogeneous translucent plastic and a light stick inserted therein to make the golf ball multiple pieces. Note column 1, lines 55-57 teaches a polyurethane material for forming the ball.

Claims 40, 42, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Sullivan et al. (5,356,941). Regarding claims 40 and 42, Sullivan discloses a process for making a ball comprising a core and cover, wherein the cover is made from using RIM technique by injection liquid urethane (col. 14, lines 50-56). Regarding claim 48, Sullivan discloses a golf ball comprising a urethane cover. The recycled reactants are process/method steps and are not relevant to the final product.

Claims 15 and 46-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Cavallero et al (5,759,676). Regarding claims 15 and 46, Cavallero discloses a golf ball comprising a core and cover. The cover has a flex modulus greater than 80,000 psi and a thickness from 0.015 to 0.14 inch (col. 7, lines 38-42). The reaction time is a process/method and is not relevant to the final product. Regarding claim 48, Cavallero discloses a golf ball comprising a polyurethane cover. The recycled reactants are process/method steps and are not relevant to the final product.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-23, 31-33, 35-38, 43, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (5,334,673) in view of Sullivan (5,356,941). Regarding claim 16, Wu discloses polyurethane golf ball parts (core or cover). Wu does not disclose reaction injection molding. However, Sullivan teaches a game ball comprising a cover formed by reaction injection molding (RIM) (col. 14, lines 50-55). Regarding claim 17, the polyurethane is a reaction product of a prepolymer and a curing agent (col. 1, lines 46-49). The prepolymer may include polyester or polyether (col. 2, lines 45-47). Regarding claims 18 and 19, the recycled materials are process/method steps and are not relevant to the final product. Regarding claim 20, Wu discloses a cover made from polyurethane and Sullivan teaches the use of RIM. Regarding claims 21 and 22, the

Art Unit: 3711

final golf ball may be painted (coating) (col. 7, lines 1-4). Regarding claim 23, the core is solid (col. 2, lines 38-40). Regarding claims 31-33, the cover composition may further include zinc oxide, zinc sulfite, UV stabilizers, and/or optical brighteners (col. 4, lines 15-22). Regarding claim 35, uniform consistency at the seams and poles is an obvious feature of any golf ball. Regarding claims 36-38, the golf ball includes a core and cover. Either may be made from polyurethane (col. 2, lines 35-40). Regarding claims 43 and 45, Wu discloses a process for forming a core with a cover and coating and adding indicia to the golf ball (col. 7, lines 1-4). Sullivan teaches using Rim to apply the cover. One of ordinary skill in the art would have modified Wu in view of Sullivan by using the RIM process to achieve the desired properties.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Sullivan as applied to claims 16-23, 31-33, 35-38, 43, and 45 above, and further in view of Molitor (4,674,751). Wu in view of Sullivan does not disclose an ionomer blended with the polyurethane in the cover material. However, Molitor teaches a cover made from a urethane and an ionomer. One skilled in the art would have modified the cover by including an ionomer to improve the durability of the cover.

Claims 41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Sullivan as applied to claims 16-23, 31-33, 35-38, 43, and 45 above, and further in view of Bayer - RIM Part and Mold Design (polyurethanes). Bayer teaches the use of glycolysis, a new way to convert polyurethane materials back to their original raw materials (page 43). One skilled in the art would have modified the invention of Wu in view of Sullivan by adding recycled material to decrease manufacturing costs.

Claims 16, 20, and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cavallero et al (5,759,676) in view of Sullivan (5,356,941). Regarding claims 16 and 20, Cavallero discloses a golf ball comprising a core and a polyurethane cover. Cavallero does not disclose reaction injection molding. However, Sullivan teaches a game ball comprising a cover formed by reaction injection molding (RIM) (col. 14, lines 50-55). Regarding claims 24, 25, and 28, Cavallero discloses a cover with a flex modulus of at least 80,000 psi (abstract). Regarding claims 26 and 27, the cover has a Shore D hardness of 70 (col. 6, lines 65-66). Regarding claim 29, since the cover is harder (Shore D) than the core material the flex modulus will also be higher (col. 8, lines 58-59). Regarding claim 30, the cover includes two layers (col. 7, lines 1-2). One of ordinary skill in the art would have modified Cavallero in view of Sullivan by using the RIM process to achieve the desired properties.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15, 22, 24, 26-28, 37, 42, and 45-47 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13, 21, 23-26, 33, 42, and 43 of copending Application No.

09/040,798. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present invention and the '798 application both claim the process of making a golf ball comprising making at least a core and a cover component by mixing two or more reactants. The '798 application produces a product with a flex modulus from 5 to 310 kpsi in a reaction time of 5 minutes or less. The present invention produces a product with a flex modulus from 1 to 310 kpsi in a reaction time of less than 2 minutes. Varying the reaction time of the product is an obvious modification of the '798 application that would promote the desired and/or optimal characteristics of the product.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed 12-11-03 have been fully considered but they are not persuasive. Regarding claim 16, applicant argues the current specification (page 1, lines 22-24) defines a multi-piece golf ball as a core of one or more layers and a cover of one or more layers. The Examiner disagrees. Applicant has not clearly defined the terms in the specification to have a particular meaning and can therefore be given the broadest possible meaning. Furthermore, the section applicant cites for support describes prior art golf balls and not the instant invention. Applicant also argues Newcomb does not disclose a golf ball formed by RIM but merely states the golf ball

can be produced by many different methods including RIM. This argument is not understood and clearly parallels the Examiner's basis for making the rejection.

Regarding claims 40, 42, and 48, applicant argues Sullivan discloses a game ball such as a softballs and baseballs and does not disclose a golf ball. Contrary to applicant's arguments Sullivan does not disclose the game ball is a softball or baseball. The term "game ball" includes any ball using in sports or games, i.e. golf balls. With respect to claims 42 and 48 applicant claims a golf ball. However, applicant argues the process limitations that have no bearing on the final product. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps MPEP 2113. In the instant case the implied structure is the golf ball and it is not clear why new or recycled materials would affect the golf ball. Furthermore, applicant has not provided evidence showing a patentable difference.

Regarding claims 15 and 46-48, applicant argues Cavallero does not disclose a cover formed from reactants or the recycled materials. Again applicant continues to argues process steps that do not affect the final product. The structural details as well as the flex modulus fall into the ranges claimed by applicant. The burden is on applicant to prove the method of production creates a patentably distinction.

Applicant's remaining arguments focus on the combination of the references. In particular applicant argues Wu in view of Sullivan is an improper combination. The Examiner disagrees. Wu clearly discloses the invention but fails to teach the RIM process. Sullivan is cited to teach the process of RIM is not new or innovative in the golfing industry.



***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 703-308-8354. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rg  
September 16, 2004



**RAEANN GORDEN**  
**PRIMARY EXAMINER**